

Professional Paper-26-68

July 1968

AD676 790

Statements of Career Intentions; Their Relationship to Military Retention Problems

by

H. Altan Bayd, Jr., and Wiley R. Bayles

Presentation at the
Alabama Psychological Association
Annual Meeting
Birmingham, Alabama May 1968

HumRRO

This document has been approved
for public release and sale;
its distribution is unlimited.

The George Washington University
HUMAN RESOURCES RESEARCH OFFICE.

The Human Resources Research Office is a nongovernmental agency of The George Washington University. The research reported in this Professional Paper was conducted under contract with the Department of the Army (DA 44-188-ARO-2). HumRRO's mission for the Department of the Army is to conduct research in the fields of training, motivation, and leadership.

The contents of this paper are not to be construed as an official Department of the Army position, unless so designated by other authorized documents.

Prefatory Note

The research reported in this paper was performed at Division No. 6 (Aviation), Human Resources Research Office, Fort Rucker, Alabama. The data presented were collected as part of the work under Exploratory Study 38, Research in Training Requirements for Warrant Officer Aviators.

This paper is based on a presentation at the 1968 annual meeting of the Alabama Psychological Association, held in Birmingham, Alabama, May 1968. In it are discussed some relationships between questionnaire responses on attitudinal items and subsequent decisions to remain in the Army or to get out of the Army.

STATEMENTS OF CAREER INTENTIONS; THEIR RELATIONSHIP TO MILITARY RETENTION PROBLEMS

H. Alton Boyd, Jr., and Wiley R. Boyles

Believing that it is better to quote the words of a good writer than to paraphrase them, I would like to quote Edwin R. Henry (1), who opened a 1965 research conference on the use of autobiographical data as psychological predictors:

A truism of the behavioral sciences is that the best predictor of future behavior is past behavior. People in the world of practical affairs who must make judgments about future behavior—personnel managers, college admission officers and the like—try to evaluate the relevant elements of past behavior with their interviews, application blanks, scholastic records, letters of reference, etc. The social scientist has tried, usually with success, to improve on this evaluation by adding his tests, questionnaires, and rating scales.

Dr. Henry mentioned "rating scales." Perhaps the greatest amount of research on scaling done in this country in the past 30 years has been concerned not with rating scales, but with attitude scaling. The value of scales in the measurement of attitudes has been shown in a variety of research areas. Their value has been pointed out by Edwards (2) and many others.

However, one caution to those who would measure attitudes, advanced by Krech (3), has been this: Don't try to measure attitudes or opinions where attitudes and/or opinions don't exist. Because of this pitfall, a scientist starting out to measure attitudes in a particular area is constrained to avoid experimenter effects, in that he must let his target population furnish the evidence of whether attitudes toward a particular subject exist, rather than creating attitudes by asking questions about them.

Another caution to "new attitude measurers" from general psychology is based on the fact that attitudes, as measured by our most sophisticated techniques, have sometimes had little correlation with behavior. So, we have the double problem, in attitude research, of trying not to create attitudes where there are none and trying to insure that the attitudes we do measure are important enough to be reflected in behavior at some point in time—for if they are not, we have measured a specter.

Most of us are familiar with research done in general psychology which has a design something like this: The researcher asks people a number of questions in the form, "What would you do if . . . ?" He collects and analyzes their responses. At some later time, he creates the "hypothetical situation" about which he had asked his questions

and then he records the behavior. As is well known, on many occasions the predictions made on the basis of the before-the-event responses, and the actual behavior relating to the real events, have been quite dissimilar.

In military psychology, however, at least since World War II, psychologists have had relatively good results with predicting behavior by means of attitude measurement—much better results than those from the above research paradigm would lead one to expect. A great deal of information on the relationship between attitudes and behavior was gathered by Stouffer *et al.* (4) during World War II and reported in their two-volume series, *The American Soldier*. The reasons for the divergent findings of civilian and military psychology in the prediction of behavior from attitudes are not understood, and the subject needs further study.

Recent findings from HumRRO Exploratory Study 38 show relationships between stated attitudes in the Army and subsequent actual behavior. The methodology and a small portion of the data are presented in this paper, along with our *opinions* as to the reasons for the differences in validity of response to attitude questions between civilian and military respondents. Implications of these rather tentative findings for future research are discussed.

About half of the flight students in the Army aviation training program at the present time are warrant officer candidates. Also, warrant officer aviators comprise about half of the Army aviator population, the other half being commissioned officers. By the end of FY68, there will be more than 16,000 aviators in the Army aviation system (5).

The warrant officer aviator has become increasingly important in this system, in terms of both numbers of men and dollars. As a result, we have focused a significant portion of our research effort on this category of personnel. This paper is a report of a part of that research.

Several years ago HumRRO was asked by the Army to provide advisory assistance in regard to attrition problems in warrant officer flight training. We soon found that measurement of success or failure of the trainees was severely hampered by the vagueness that characterized the objectives of the training. We attempted to assist the training authorities in establishing realistic training goals. However, this attempt soon had to be abandoned when we found that there was an earlier gap in the system. There was not a consensus among commanders as to the proper role of the aviation warrant officer in the Army.

As usual, there was a well-structured set of regulations, but as is often the case in any large system whose needs and requirements are subject to constant change, it was the opinion of many commanders in the field that the regulations no longer properly described the actual role or utilization of the aviation warrant officer. No criticism of the Army is intended here; the problem of discrepancy between codified procedures and actual practices is common to all large institutions. We have had warrant officers in the Army for 50 years and have grown used to thinking of them as older, highly experienced technicians. The typical *aviation* warrant officer, however, is in his twenties and has

only a few years of military background. It is apparent that the concept of the warrant officer had not changed as fast as had the age and experience levels of the aviation warrant officer.

We began, at this point, to consider means of gathering data for job descriptions and job analyses. We soon found that many agencies throughout the Army were interested in new data on aviation warrant officers. This and other factors led us to broaden the scope of our study beyond training and job descriptions to include considerations of (a) retention in the Army past the three-year obligated tour, and (b) the relationship between this retention and attitudes toward the Army in general, and toward the Army aviation warrant officer program in particular.

After considering the possibility of, first, data collection by structured interview, with representative sampling, and, second, attitude scale construction, a combination of psychometric considerations and practicality caused us to choose a comprehensive, autobiographical, attitudinal, and job description questionnaire as our first data collection instrument. Fortunately, we were given great freedom in terms of time and resources to develop a psychometrically sound instrument. Early in our planning, the consideration of comparative costs led us to an attempt to survey the entire population rather than work from a sampling approach.

The first step in our effort was to conduct tape-recorded depth interviews with a sample of eight aviation warrant officers roughly representative of the population on geographical, experience, and several other military variables. These interviews were as unstructured as possible, in order that the topics and problems covered be those of the aviation warrant officers themselves, rather than those resulting from preconceptions of the researchers.

From these interviews and from samples of the military literature and attitude questionnaires, such as Harding and Wong's (6) Air Force career intent study, we constructed a trial questionnaire. We distributed this instrument to a number of content experts and asked them to suggest deletions and additions. The questionnaire was revised on this basis, and a "pretest" questionnaire was administered to a 40-man sample of aviation warrant officers. This sample was representative of the population on a number of major variables, including procurement source, type of aviation experience, type of overseas service, amount of combat experience, marital status, and age. The sample was severely restricted only on the variable of current geographical location. The purpose of the pretest was to test the items for clarity and to determine practical administration procedures. After each subject had completed the questionnaire, a depth interview on the items (about four hours in length) was conducted with each subject in order to provide material for the final revision.

Nominally, the final revision of the questionnaire included 192 items. Actually, there were provisions for a maximum of 1,250 responses. The questionnaires were mailed to all individuals in the population in June 1966, with assurances of anonymity to individual subjects. Previous experience with questionnaires, as described by Edwards (2), has

indicated that the differences between anonymous and signed attitude measures can be reduced when there is sufficient assurance of privacy. By our data collection cutoff date of December 1966, we had received 1,957 completed questionnaires representing 83% of the target population. Since 10% probably did not receive questionnaires because of the rapidly changing military situation, we believe that we received completed questionnaires from over 90% of the subjects who were reached.

We have been engaged, since January 1967, in a number of analyses of our data, pointed mainly toward military problems. This paper represents our first, and admittedly modest, attempt to consider the data with reference to its general psychological interest. We will deal with the relationship between certain of our attitudinal items and subsequent retention-in-the-Army behavior.

During the period from the end of the survey data collection to January 1968, a total of 445 of our subjects, in the group which is least predictable with respect to retention behavior—that is, those who were in their three-year obligated tours and who had less than 10 years of total service—have finished their obligated tours of duty as aviation warrant officers. At the end of the obligated tour, one of three decisions must be made by the subject: (a) to get out of the Army, (b) to extend his obligated tour for a period of from one to 24 months, or (c) to accept indefinite status as an aviation warrant officer. Each man is allowed one extension of duty, for a specified period of time, at the end of his obligated tour, if he desires. Then he must either leave the Army or accept indefinite status.

To define these decisions in terms of their reflection of positive or negative actions toward the Army, the indefinite status decision is most positive—being clearly a decision toward an Army career, at least on a temporary basis; the decision to extend the obligated tour is intermediate and quite ambiguous, as the reasons for extension may be personal and transitory and, of course, the decision to depart the Army is the most negative.

✓ The present sample consists of 445 persons. Of these, 267 departed the Army at the end of the initial obligated tour, 61 departed the Army at the end of the specific extension, and 117 accepted indefinite tour status, either at the end of the initial obligated tour, or at the end of an extension of that tour. It should be borne in mind that 74% of the total group did decide to get out of the Army. Also, it should be kept in mind that very small differences in numbers of men will have practical significance, in that we are describing the behavior of men in whom the Army has about \$90,000 invested per person in terms of training costs alone.

The questionnaire items to be covered relate to the following topics: (a) Background; (b) Wives' attitudes; (c) Attitudes toward financial matters; (d) Attitudes toward advancement opportunities; (e) Attitudes toward training received and training-induced expectations; (f) Attitudes toward job, utilization, and officer efficiency reports; and (g) Expression of career intentions. Chi Square comparisons are made between those who stay in the Army (the retainees), and

those who get out (the departees). In addition, data are presented that show the proportion who departed the Army, that is, the attrition probability, as a function of questionnaire response alternative. The response frequency to certain of the questionnaire alternatives is small. Consequently, some of the attrition probability values are likely to be unreliable. However, the minimum category-cell-size from which we have concluded is $N=11$, and perhaps the most amazing characteristic of our data thus far is its high stability.

With reference to the background of our retainees and departees, we have considered two items: civilian schooling and marital status (collapsed to single versus married categories) as shown in Figure 1.

Background of Retainees and Departees
(Marital Status and Civilian Schooling)

ON EACH OF THE FOLLOWING QUESTIONS, SELECT THE ALTERNATIVE WHICH BEST DESCRIBES YOUR OWN PERSONAL SITUATION.

7. Present marital status:
1. ☐ single, not engaged
 2. ☐ single, engaged
 3. ☐ widowed, engaged
 4. ☐ married
 5. ☐ separated
 6. ☐ divorced
 7. ☐ widowed

11. How far did you go in school before you came into the Army (or other branch of the armed forces) on extended active duty?
1. ☐ less than high school
 2. ☐ high school graduate
 3. ☐ high school equivalent (GED, or other equivalency)
 4. ☐ college -- less than two years
 5. ☐ college -- two years or more
 6. ☐ college degree

(If none of the above fits your situation exactly, check the one that "best fits" you and describe your situation in the following space.)

Figure 1

Both items show significant group differences. Marital status is, of course, partly a function of age. Since the younger people with less time invested in Army careers tend to get out at a higher rate than those who have invested more time, it is to be expected that the departing group would have a higher proportion of single men. As amount of civilian schooling rises, so do the probabilities of leaving the Army. It may be that those men with more education perceive the opportunities in civilian life to be greater than those in the military. Also, if career aspirations are a function of education, then the highest warrant officer rank may not provide incentive enough to satisfy many of the more educated respondents.

Related military retention research by Malone (7) has indicated that the attitudes of the wives of military men are a strong influence on

probability of separation from the service. Questionnaire items in regard to wives' attitudes and influence are shown in Figure 2. Results for these questions are shown in Figure 3.

Questions Describing Wives' Attitudes Toward Military Career Intentions

34. For the items listed below, circle the number that you feel best describes *your wife's feelings*. (If unmarried, check the blank "not applicable; I am not married" and proceed to item number 36.)

1. _____ not applicable; I am not married	
	<div style="display: flex; justify-content: space-around; width: 100%;"> <div style="text-align: center;">Very Pleased</div> <div style="text-align: center;">Somewhat Pleased</div> <div style="text-align: center;">Somewhat Displeased</div> <div style="text-align: center;">Very Displeased</div> </div>
Your Wife's Feelings About:	2. 1 2 3 4 Your present job assignment
	3. 1 2 3 4 Your present duty station
	4. 1 2 3 4 The locations in which you have been stationed since becoming an Aviation Warrant Officer
	5. 1 2 3 4 The frequency of your TDY assignments
	6. 1 2 3 4 The frequency of your PCS
	7. 1 2 3 4 Your rate of advancement as an Aviation W.O.
	8. 1 2 3 4 Your base pay and allowances
	9. 1 2 3 4 Your flight pay
	10. 1 2 3 4 Your present career intentions
	11. 1 2 3 4 The changes of residence associated with military service
	12. 1 2 3 4 Her social status as the wife of a Warrant Officer Aviator

127. What influence has your wife had on your Army career plans?
1. _____ not applicable; I am not married
 2. _____ she has had a great influence on my Army career plans
 3. _____ she has had some influence on my Army career plans, but the decision is primarily mine to make
 4. _____ she has had little influence on my Army career plans
 5. _____ she has had no influence on my Army career plans
128. Which of the following *best describes* your wife's attitude?
1. _____ not applicable; I am not married
 2. _____ she wants me to make the Army a career
 3. _____ she wants me to stay in the Army a while longer
 4. _____ she wants me to get out of the Army
 5. _____ she doesn't care whether I stay in or get out

Figure 2

We are dealing with questions that asked the respondents to report wives' attitudes toward their social status as wives of aviation warrant officers and toward military careers for their husbands. Question 127 is a qualifier asking for a statement of the amount of influence the wife has had on career decisions. As can be seen, the departure group differed significantly from the retained group on all three items. To relate analyses we used, in general, a k by n test with varying levels of k . Our consideration was stable cell sizes and we were collapsing along a positivity-negativity continuum.

Response Proportions to Questions on Wives' Attitudes and Influence

Item number 34-12:* Wives' attitudes toward their social status as wives of aviation warrant officers

	Departees	Retainees
Pleased	.66	.75
Displeased	.34	.25

* χ^2 $p < .05$

Item number 127:* Wives' influence on husbands' career plans

	Departees	Retainees
Great influence	.12	.13
Some influence	.67	.77
Little or no influence	.21	.10

* χ^2 $p < .05$

Item number 128:** Wives' attitudes toward Army careers for their husbands

	Departees	Retainees
Wants continued career	.07	.45
Wants in a while longer	.05	.17
Wants husband to get out	.53	.17
Doesn't care either way	.35	.21

** χ^2 $p < .01$

Figure 3

We have also computed the proportion of departees who responded in each of the alternative categories for these Wives' Attitudes items. These are shown in Figure 4. The alternative and item numbers

Departure Probabilities Associated With Response Alternatives (N's Shown in Parentheses)

Item number 34-12: Wives' attitudes toward their social status as wives of aviation warrant officers

Very Pleased	Somewhat Pleased	Somewhat Displeased	Very Displeased
(80)	(142)	(66)	(34)
.56	.70	.76	.74

Item number 127: Wives' influence on husbands' career plans

Great Influence	Some Influence	Little Influence	No Influence
(39)	(232)	(32)	(23)
.67	.65	.87	.87

Item number 128: Wives' attitudes toward Army careers for their husbands

Wants Continued Career	Wants in a While Longer	Wants Husband to Get Out	Doesn't Care Either Way
(61)	(28)	(134)	(100)
.26	.39	.87	.78

Figure 4

correspond to those in Figure 2. Using the overall departure probability of .74 as a baseline, responses on the first two items, considered individually, are not particularly impressive. However the third, item 128, shows a clear attitude-behavior relationship. Looking on this item as a positive-negative continuum, alternative 5 would be a neutral category and would actually come between alternatives 3 and 4 on that continuum. Thus, the probabilities of departure as a function of increasingly negative statements of wives' attitudes toward an Army career would be .26, .39, .78, and .87. An interesting point for further analysis is that the departees tended to report less influence of their wives on their career plans than did the retainees. Chi Square analyses of five items related to wives' attitudes were performed, of which the three reported in this paper were significant.

Turning now to financial prospects, the two groups differed significantly in the ways they responded to several questionnaire items in this area. Considering only Army pay, the departees tended to have a lower regard for their economic status as soldiers. Further, the respondent who answered that he thought his chances for financial advancement in the Army were better than his chances in civilian life had an attrition probability in this sample of only .39. In this content area three items were subjected to Chi Square analysis. Item 44-7 was significant at the .05 level, 44-8 was not significant, and 123 was significant at the .01 level.

Departees responded significantly more negatively than retainees on items relating to their feelings about the possibility for advancement in the Army. Only the three items in this area shown in Figure 5 were subjected to Chi Square analysis. Item 44-11 and item 67 yielded Chi Squares significant at the .01 level. The other item, number 62, was not significant.

On items relating to training as preparation for duties in the field and on the discrepancies between what they expected active duty to be like compared to what they actually found it to be like, our two groups responded in a significantly different manner, with the departees being more negative. Analysis of the seven items in this content area, shown in Figure 6 resulted in four Chi Squares significant at the .01 level, item numbers 88, 103, 104, and 110. Number 114-7 was significant at the .05 level; items 100 and 107 were not significant.

Items dealing with job satisfaction, satisfaction with utilization, and the accuracy and fairness of officer efficiency reports are shown in Figure 7. Chi Square analyses for three items that were significant appear in Figure 8. Departees tended to respond more negatively to such items. Attrition probabilities on these items range as high as .93, .96, and 1.00 on the extreme negative alternatives.

✓ The final items we are presenting are those related to career intent, as shown in Figure 9. Malone (7), in his retention research for the U.S. Navy, reports that items regarding career intent provide indices of high validity for predicting the behavioral criterion of getting out of the service or of staying in. Our data support this conclusion.

Attitudes Toward Financial Matters

44. Circle the number which best represents *your feelings* about each of the items listed below.

	Very Pleased	Somewhat Pleased	Somewhat Displeased	Very Displeased	
1.	1	2	3	4	Your present duty station
2.	1	2	3	4	Your present job assignment
3.	1	2	3	4	Your <i>first</i> assignment as a W.O. Aviator as far as geographical <i>location</i> was concerned
4.	1	2	3	4	The extent to which your assignments have corresponded with your preferred locations
5.	1	2	3	4	The frequency with which W.O. Aviators are typically given PCS assignments
6.	1	2	3	4	The frequency with which W.O. Aviators typically receive overseas assignments
7.	1	2	3	4	Your financial condition (consider only your income as an Army W.O.)
8.	1	2	3	4	The amount of flight pay that you receive
9.	1	2	3	4	The housing facilities available to you at your present duty station
10.	1	2	3	4	The amount of on-the-job training that you have received since becoming a W.O. Aviator
11.	1	2	3	4	The possibilities available to a W.O. Aviator to obtain a commission
12.	1	2	3	4	The rate of advancement that you can reasonably expect as a W.O. Aviator

123. In your opinion, your chances for *financial* advancement with the Warrant Officer Aviation Program are:

1. _____ better than your chances in civilian life
2. _____ equal to your chances in civilian life
3. _____ worse than your chances in civilian life

Attitudes Toward Advancement Opportunities

62. How do you feel about a W.O. Aviator's chances to get a commission *if he can meet the age and education qualifications*?

1. _____ very easy
2. _____ somewhat easy
3. _____ somewhat difficult
4. _____ very difficult

67. In your opinion, how does advancement in the military compare with advancement in civilian occupations in general?

1. _____ better
2. _____ equal
3. _____ worse
4. _____ don't know

Figure 5

Attitudes Toward Training Received and Training-Induced Expectations

88. When you began your first operational assignment after becoming an Aviation W.O., did you have adequate knowledge of the tactical concepts involved in joint operations of infantry, armor and artillery?

1. _____ yes
2. _____ no

100. How accurately did your WOC preflight course build your expectations about what your field assignments would be like?

1. _____ not applicable; I did not attend WOC preflight course
2. _____ very accurately
3. _____ somewhat accurately
4. _____ somewhat inaccurately
5. _____ very inaccurately

103. Compared with what I *expected* it to be like when I *finished flight training*, I find that, thus far, *being* an Aviation Warrant Officer is:

1. _____ very much better
2. _____ better
3. _____ about the same
4. _____ worse
5. _____ very much worse
6. _____ not applicable; I did not finish WOC flight training

104. In *which single phase* of your association with the Army do you feel your present attitudes toward the Army were most strongly formed?

1. _____ prior to preflight, as an enlisted man
2. _____ prior to preflight, as a civilian or while in another branch of the service
3. _____ during WOC preflight
4. _____ during flight training
5. _____ during my first assignment
6. _____ after my first assignment
7. _____ other (specify) _____

107. How appropriate for your first assignment do you feel your WOC preflight course subjects were:

1. _____ not applicable; I did not attend WOC preflight course
2. _____ highly appropriate
3. _____ somewhat appropriate
4. _____ somewhat inappropriate
5. _____ highly inappropriate

110. Based on *your own* experience, how would you rate the WOC preflight course you attended as preparation for *non-flight* field duties usually performed by W.O. Aviators?

1. _____ not applicable; I did not attend WOC preflight course
2. _____ fine
3. _____ good
4. _____ fair
5. _____ poor

Figure 6

Attitudes Toward Job, Utilization, and Officer Efficiency Reports

114. Rate each of the following statements, by circling the number which is most appropriate.

	True -- nearly all the time	True -- most of the time	True -- some of the time	Seldom true	Almost never true	
1.	1	2	3	4	5	The typical Aviation W.O. is fulfilling his proper role in the Army
2.	1	2	3	4	5	The typical Aviation W.O. is utilized interchangeably with junior Commissioned Officers
3.	1	2	3	4	5	The typical Aviation W.O. is utilized in accordance with his primary MOS
4.	1	2	3	4	5	The typical Aviation W.O. should be utilized in assignments of greater responsibility than he usually is
5.	1	2	3	4	5	Sooner or later, the typical Aviation W.O. can expect the situation to arise in which he will be assigned a position of leadership over junior Commissioned Officers
6.	1	2	3	4	5	The typical Aviation W.O. can expect to spend a significant portion of his duty time in additional duty activities
7.	1	2	3	4	5	At the time of his graduation from flight school, the typical Aviation W.O. has a realistic idea of what his duties will be like in his first field assignment
8.	1	2	3	4	5	The typical Aviation W.O. can expect to be utilized as his unit commander sees fit, regardless of what Army Regulations specify about Warrant Officer utilization
9.	1	2	3	4	5	The typical Aviation W.O. considers his association and work with the Army to be gratifying and rewarding
10.	1	2	3	4	5	The typical Aviation W.O. can expect his OER's to be based more on his additional duties than his flying duties

115. Circle the number which best represents *your feelings* about the item. A number (5) has been included which represents NOT APPLICABLE. Do not circle number (5) unless the item is clearly *not applicable* to you.

	Very Pleased	Somewhat Pleased	Somewhat Displeased	Very Displeased	Not Applicable	
1.	1	2	3	4	5	The degree to which you have been properly utilized in your present assignment
2.	1	2	3	4	5	The degree to which you have been properly utilized considering all of your assignments as an Aviation W.O.
3.	1	2	3	4	5	The amount of flying that you do in your present assignment
4.	1	2	3	4	5	The amount of flying that you have done since becoming an Aviation W.O.
5.	1	2	3	4	5	The amount of non-flying duties that you perform in your present assignment
6.	1	2	3	4	5	The amount of non-flying duties that you have performed since becoming an Aviation W.O.
7.	1	2	3	4	5	The number of TDY assignments which you have received
8.	1	2	3	4	5	The degree to which your rating officers have been in a position to make fair and accurate judgment of your performance and ability
9.	1	2	3	4	5	The degree to which your efficiency reports are an accurate and fair measure of your performance and ability
10.	1	2	3	4	5	The OER system as it has related to your Army career thus far

Figure 7

Response Proportions to Questions on Attitudes Related to
Job Satisfaction, Utilization, and Officer Efficiency Reports

Item number 114-9:** The typical aviation warrant officer considers his association and work with the Army to be gratifying and rewarding.

	Departees	Retainees
True, most or nearly all the time	.31	.50
True, some of the time	.50	.38
True, seldom or almost never	.19	.12

** χ^2 $p < .01$

Item number 115-2:** How do you feel about the degree to which you have been properly utilized considering all of your assignments as an aviation warrant officer?

	Departees	Retainees
Pleased	.70	.88
Displeased	.30	.12

** χ^2 $p < .01$

Item number 115-9:* How do you feel about the degree to which your efficiency reports are an accurate and fair measure of your performance and ability?

	Departees	Retainees
Pleased	.73	.79
Displeased	.27	.21

* χ^2 $p < .05$

Figure 8

Of five career intent items analyzed, all yielded Chi Squares significant at the .01 level, as shown in Figure 10, indicating that the retention and attrition groups responded to the items' alternatives differentially.

Probability of attrition (departures) computed for the five career items, is shown in Figure 11; also shown are two items regarding career intentions, particularly predictive of an individual's behavior on the dichotomous criterion of staying in or getting out of the Army. If a subject responds in either of the extreme categories on item 126, or if he checks the alternative "I'm getting out of the Army at my first opportunity" on item 106, we have a very good idea of what he is going to do.

We have discussed only a small portion of our data in this paper. The sample of questionnaire items selected shows that, as might be expected, departees responded much more negatively on attitudinal questions than did the retainees. Further, our data substantiate the finding that responses on direct questions of career intent have high predictive validity.

Obviously, we are at a preliminary stage in this research and in our data analyses. The first question that arose—"Are there major differences between attitudes as stated on our questionnaire for groups who later differ on retention behavior?"—has been answered affirmatively. The important question now becomes—"How much, if any, have we increased our predictive ability by knowing how they

Expressions of Career Intentions

54. When you began Warrant Officer Candidate training, did you intend to make the Army your career if you completed the course?

1. ☐ not applicable; I did not attend WOC
2. ☐ yes
3. ☐ no
4. ☐ was undecided

63. Do you feel that the rank of CWO-4 is sufficiently high to motivate you to remain in the W.O. Aviation Program?

1. ☐ definitely yes
2. ☐ probably yes
3. ☐ probably no
4. ☐ definitely no

64. Do you feel that additional Warrant Officer grades (CWO-5/CWO-6, for example) would increase your motivation to remain in the W.O. Aviation Program?

1. ☐ definitely yes
2. ☐ probably yes
3. ☐ probably no
4. ☐ definitely no

106. At this point in your military experience, what are your real opinions about the Aviation Warrant Officer Branch? Check as many as apply, and add as many "others" as you want to.

1. ☐ Aviation W.O.'s are fulfilling a critical need in the Army
2. ☐ despite its faults, it is a highly desirable Branch for an Army career
3. ☐ everything considered, I'd rather be in some other military job
4. ☐ getting a commission is the only way I'll stay in the Army
5. ☐ I should not have chosen *this* Branch
6. ☐ I'm getting out of the Army at my first opportunity
7. ☐ everything considered, I intend to make my career in this Branch
8. ☐ I would recommend this Branch to a friend who was thinking of starting a military career
9. ☐ Other (specify)

126. Which of the following *best describes* your Army career intentions?

1. ☐ definitely intend to make the Army a career
2. ☐ most likely will make the Army a career
3. ☐ even chance of making the Army a career
4. ☐ most likely will not make the Army a career
5. ☐ definitely do not intend to make the Army a career

Figure 9

differ?" We have not yet reached this stage of converging operations, where we can answer these questions within the research design—"The probability that a man who says 'A,' 'B,' and 'C' will do thus and so, is x."

Obviously, the data presented here were produced by interactions of a complex series of attitudinal and situational variables. If our approach to them seems somewhat haphazard from the point of view of academic psychology, I can only say that this is due, in part at least, to our first obligation: Furnishing the Army, as soon as possible, with psychological data which have military usefulness. As a result of this approach, our analyses have been oriented toward military problems thus far, rather than toward solution of general problems in the area of attitude measurement. We decided to present these data because we feel that even at this preliminary stage, there is evidence which suggests that crude questionnairing techniques can produce good data in military psychology, in the sense that responses to attitude questions are related to subsequent important behavior.

Response Proportions

Response Proportions to Questions on Statements of Career Intent

Item number 54:**	Did you intend an Army career when you began warrant officer candidate training?		
		Departees	Retainees
	Yes	.37	.77
	No or undecided	.63	.23
Item number 63:**	Is the highest warrant officer rank (W-4) high enough to motivate you to stay in the warrant officer program?		
		Departees	Retainees
	Yes	.06	.32
	No	.94	.68
Item number 64:**	Would additional warrant officer ranks increase your motivation to stay in the warrant officer program?		
		Departees	Retainees
	Yes	.60	.91
	No	.40	.09
Item number 106-6:**	I'm getting out of the Army at my first opportunity. (Checked this alternative versus didn't check it)		
		Departees	Retainees
	Checked item	.60	.09
	Didn't check item	.40	.91
Item number 126:**	Which best describes your Army career plans?		
		Departees	Retainees
	Intend to stay in	.04	.54
	Undecided	.15	.30
	Intend to get out	.81	.16

** χ^2 $p < .01$

Figure 10

Departure Probabilities Associated With Response Alternatives
(N's Shown in Parentheses)

Item number 54: Did you intend an Army career when you began warrant officer candidate training?

Yes	No	Was Undecided
(180)	(45)	(158)
.54	.95	.88

Item number 63: Is the highest warrant officer rank (W-4) high enough to motivate you to stay in the warrant officer program?

Definitely Yes	Probably Yes	Probably No	Definitely No
(5)	(51)	(103)	(286)
.40	.33	.66	.84

Item number 64: Would additional warrant officer ranks increase your motivation to stay in the warrant officer program?

Definitely Yes	Probably Yes	Probably No	Definitely No
(143)	(162)	(74)	(65)
.47	.79	.92	.98

Item number 106-6: I'm getting out of the Army at my first opportunity. (Ss either checked this alternative or didn't check it)

Checked Alternative	Did not check Alternative
(206)	(239)
.95	.55

Item number 126: Which best describes your Army career plans?

Definitely intend Career	Most likely will make it Career	Even Chance	Most likely will not make it Career	Definitely do not intend Career
(34)	(41)	(85)	(122)	(161)
.12	.20	.59	.86	.99

Item 114-9: The typical aviation warrant officer considers his association and work with the Army to be gratifying and rewarding.

True, nearly all the time	True, most of the time	True, some of the time	Seldom True	Almost never True
(15)	(145)	(207)	(67)	(11)
.60	.63	.79	.79	1.00

Item number 115-2: How do you feel about the degree to which you have been properly utilized considering all of your assignments as an aviation warrant officer?

Very Pleased	Somewhat Pleased	Somewhat Displeased	Very Displeased
(99)	(228)	(86)	(28)
.66	.74	.85	.96

Item number 115-9: How do you feel about the degree to which your efficiency reports are an accurate and fair measure of your performance and ability?

Very Pleased	Somewhat Pleased	Somewhat Displeased	Very Displeased
(111)	(205)	(77)	(30)
.63	.75	.71	.93

Figure 11

LITERATURE CITED

1. *Research Conference on the Use of Autobiographical Data as Psychological Predictors*, conference proceedings, held at Sedgefield Inn, Greensboro, N.C., June 1965, The Richardson Foundation, 1966
2. Edwards, A.L. *Techniques of Attitude Scale Construction*, Appleton-Century-Crofts, Inc., New York, 1957.
3. Krech, David. *Theoretical Foundations of Psychology*, Harry Helson (ed.), D. Van Nostrand Company, Inc., Princeton, N.J., 1951.
4. Stouffer, S.A., et al. *The American Soldier. Volume I: Adjustment During Army Life; Volume II: Combat and Its Aftermath*, Princeton University Press, Princeton, N.J., 1949.
5. *Journal of the Armed Forces*, vol. 105, no. 24, 10 February 1968, p. 26.
6. Harding, F.D. and Wong, K.K.L. *Attitudes and Career Intentions of Officer Training School Graduates*, PRL-TR-64-26, Personnel Research Laboratory, Aerospace Medical Division, Lackland AFB, Tex., October 1964.
7. Malone, J.S. *A Study of Enlisted Personnel Retentions in the Navy*, Research Report SRR 68-6, U.S. Naval Personnel Research Activity, San Diego, Calif., September 1967.

Unclassified

Security Classification

DOCUMENT CONTROL DATA - R & D

(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)

1. ORIGINATING ACTIVITY (Corporate author) Human Resources Research Office The George Washington University Alexandria, Virginia 22314		2a. REPORT SECURITY CLASSIFICATION Unclassified	
		2b. GROUP	
3. REPORT TITLE STATEMENTS OF CAREER INTENTIONS: THEIR RELATIONSHIP TO MILITARY RETENTION PROBLEMS			
4. DESCRIPTIVE NOTES (Type of report and inclusive dates) Professional Paper			
5. AUTHOR(S) (First name, middle initial, last name) H. Alton Boyd, Jr., and Wiley R. Boyles			
6. REPORT DATE July 1968		7a. TOTAL NO. OF PAGES 18	7b. NO. OF REFS 7
8a. CONTRACT OR GRANT NO. DA 44-188-ARO-2		9a. ORIGINATOR'S REPORT NUMBER(S) Professional Paper 26-68	
b. PROJECT NO. 2J024701A712 01			
c.		9b. OTHER REPORT NO.(S) (Any other numbers that may be assigned this report)	
d.			
10. DISTRIBUTION STATEMENT This document has been approved for public release and sale; its distribution is unlimited.			
11. SUPPLEMENTARY NOTES Paper for Alabama Psychological Association Annual Meeting, Birmingham, Alabama, May 1968		12. SPONSORING MILITARY ACTIVITY Office, Chief of Research and Development Department of the Army Washington, D.C. 20310	
13. ABSTRACT A world-wide questionnaire survey was conducted to define the utilization of, and to determine the optimum role for, aviation warrant officers in the U.S. Army. Responses to questions regarding their career intentions, their systems of values, and their reasons for pursuing a civilian or military career were made by 1,957 aviation warrant officers. They constituted 83% of the target population. Since the survey, obligated tours of duty have expired for 635 of the men. Of these, 361 departed active duty and 274 chose to extend their active service. Comparisons of the attitudes, motivations, and values of the two different groups have implications for manpower planning in the Army aviation system. The demographic and attitudinal contrasts between these two groups, and the predictive utility of the questionnaire method in this context are discussed.			

Security Classification

Unclassified

Security Classification

U164463